

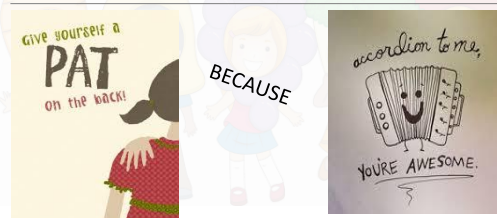
Meal Pattern 101

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IOWA DEPARTMENT OF EDUCATION, SUMMER 2016

Objectives

- Explore lunch and breakfast meal patterns
- Component vs Item
- Offering vs Planning/Preparing
- Two Serving Options
- Examine each meal component
- Practice menu planning

But first---THANKS!



Breakfast and Lunch Meal Patterns

	BREAKFAST			LUNCH		
	Grades K-2 ^a	Grades 3-5 ^a	Grades 6-12 ^a	Grades K-2	Grades 3-5	Grades 6-12
Meal Pattern	Amount of Food^b Per Week (Minimum Per Day)					
Fruits (cups) ^d	5 (1) ^a	5 (1) ^a	5 (1) ^a	2½ (½)	2½ (½)	5 (1)
Vegetables (cups) ^d	0	0	0	3½ (¾)	3½ (¾)	5 (1)
Dark green ^e	0	0	0	½	½	½
Red/Orange ^e	0	0	0	½	½	¾
Beans/Pots (Legumes) ^f	0	0	0	½	½	½
Starchy ^f	0	0	0	½	½	½
Additional Veg to Reach 1 cup ^g	0	0	0	1	1	1½
Grains (oz eq) ^h	7-10 (1) ^a	8-10 (1) ^a	9-10 (1) ^a	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz eq) ⁱ	0 ^a	0 ^a	0 ^a	8-10 (1)	9-10 (1)	10-12 (2)
Fluid milk (cups) ^j	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)
Other Specifications: Daily Amount Based on the Average for a 6-Day Week						
Maximum calories (kcal) ^{k,m}	350-500	400-550	450-600	550-650	600-700	750-850
Saturated fat ⁿ	< 10	< 10	< 10	< 10	< 10	< 10
% of total calories ^{p,q}	< 450	< 470	< 500	< 640	< 710	< 740
Sodium (mg) ^r	< 450	< 470	< 500	< 640	< 710	< 740
Trans fat ^s	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving					

Numbers indicate weekly minimums and maximums.

Numbers in (parenthesis) indicate daily minimums.

(Maximums on meat/meat and grains have been removed, but calorie, saturated fat, and sodium maximums are still in effect.)

HHFKA Meal Patterns

Build a Healthy Lunch



Menu Planning Approach

Daily minimums

Weekly minimums

Weekly maximums, some lifted but serve as a planning guide

Lunch intended to meet 1/3 of daily calories

Breakfast intended to meet 1/4 of daily calories

5 components for lunch; 3 components for breakfast

Specific grade groups for both breakfast and lunch

How Much to Offer Daily? It Depends...

Breakfast Grade Groups:

K-5, 6-8, 9-12 or

K-8, 9-12 or

K-12

Lunch Grade Groups:

K-5, 6-8, 9-12 or

K-8, 9-12

No K-12 or 6-12 option

RCC's might need a waiver to serve various grade groups with one meal pattern due to legitimate safety concerns.





What are Components?



5 Lunch Components

1. **Fruit**
2. **Vegetable**
3. **Meat/meat alternate**
4. **Grain**
5. **Fluid Milk**



3 Breakfast Components

1. **Fruit** (fruit, **veg**, juice)
 - May substitute **vegetable**
 - To credit starch, must serve 2 cups of any other sub-group during week
2. **Grain** (meat/meat alternate)
 - Serve one 'real' grain then M/MA may be used as additional grain
3. **Fluid Milk**

Two Serving Options: **Option 1**-Lunch & Breakfast



SERVE ONLY:

- All students get all components in at least minimum required amounts
- K-12 breakfast may use Serve Only
- K-8 lunch may use Serve Only
- 9-12 lunch may **NOT** use Serve Only

Two Serving Options: **Option 1**, continued

Lunch, serve only:

Students must be served all 5 components

- ½ cup vegetable, ½ cup fruit, 1 ounce meat/ma, 1 oz eq grain, 8 oz fluid milk
- Remember weekly meat/ma and grain minimums!

Breakfast, serve only:

Students must be served all 3 components

- 1 oz eq grain, 1 cup fruit, 8 oz. fluid milk
- Remember weekly grain minimums!



What's the Difference?

Component

or

Item ?

5 COMPONENTS for Lunch:

- **Fruit**, **Vegetable**, **Meat/MA**, **Grain**, **Milk**

3 COMPONENTS for Breakfast:

- **Fruit**, **Grain**, **Milk**

Three fruit component ITEMS:

- **Apple**, **Orange Juice**, **Peaches**

Three grain component ITEMS:

- **Brown Rice**, **Bread**, **Crackers**

What's the Difference?

Offered

VS

Prepared

Example: If Refried Beans is the only vegetable offered:

Must OFFER 1 cup of refried beans to students in grades 9-12

Production records would indicate 1 cup serving size even though students are allowed to take ½ cup as part of OVS

Planned servings would indicate how many 1 cup servings are being PREPARED

Two Serving Options: **Option 2**



Offer vs Serve (OVS):

- K-12 breakfast may use OVS
- K-5, 6-8 and K-8 lunch may use OVS
- 9-12 lunch is **REQUIRED** to use OVS
- *Reduces waste and allows students choices*

Two Serving Options: Option 2-Lunch



Offer vs Serve (OVS) at lunch:

- MAY choose all 5 components in full amounts
- Students *must* take 3 of 5 components
- One component must be at least ½ cup fruit OR vegetable for a reimbursable meal
- Other 2 components must be full daily minimum
- Student's choice what to decline



Two Serving Options: Option 2-Breakfast

Offer vs Serve (OVS) at breakfast:

- *MUST* offer all 3 components in *at least* 4 items
- Students *MAY* choose all 3 components and all 4 items in full amounts
- Students *must* take at least 3 items
- One item must be at least ½ cup fruit for a reimbursable meal
- Student's choice what to decline



Breakfast Note



2 oz. eq. =
1 item or 2 items

- SFAs have some crediting
- discretion at breakfast.
- Signage is important!



3 oz. eq. =
1, 2, or 3 items

Questions so far...

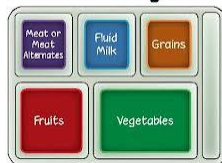
Recap:

- Components/items
- Offered/Prepared
- Grade-groups
- Serve Only/OVS



The 5 Components Deconstructed

Build a Healthy Lunch



Milk-Lunch & Breakfast

"Milk" is fluid milk only

- Allowed- fat-free (skim) or low-fat (1%)
 - Low-fat (1%) must be unflavored/white
 - Fat-free (skim) may be flavored or unflavored
- Must offer two types at breakfast and lunch
 - It's a local decision on what types are offered
- Lactose-free milk is okay
- Soy milk that is equal to cow's milk is okay



Fruits



Fruits-Lunch & Breakfast



- May offer fresh, frozen, canned, dried, and/or juice
- Fresh fruit can be whole or cut
- Frozen fruit with added sugar is allowed
- Canned fruit must be in juice or light syrup
- Dried fruit with added sugar is allowed
- No more than half of fruit may be juice at both Lunch and Breakfast
- Must be 100% juice

Crediting Fruit-Lunch & Breakfast

Minimum creditable serving is 1/8 cup
 Creditable amount is based on volume served:
 1/2 cup fruit/juice credits as 1/2 cup fruit
EXCEPT Dried fruit where:

- 1/4 cup dried fruit credits as 1/2 cup fruit



Vegetables



Vegetable Sub-Groups:



- ☐ Can you list the vegetable sub-groups?
- ☐ Can you list the minimum amounts that must be offered each week?



Vegetables Subgroups



DARK GREEN-1/2 cup

RED/ORANGE-3/4 or 1-1/4 cups



STARCHY-1/2 cup



OTHER-1/2 or 3/4 cup



DRIED BEAN/LEGUME-1/2 cup

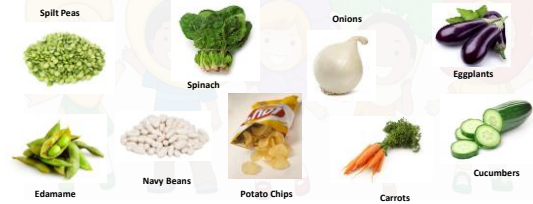


Activity—Vegetable Subgroups Pictures



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Activity—Vegetable Subgroups Pictures



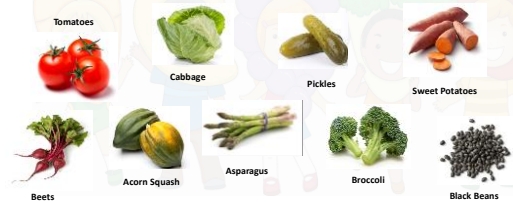
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Activity—Vegetable Subgroups Pictures



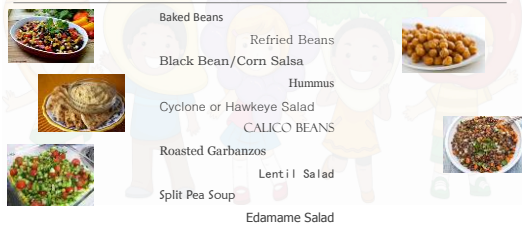
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Activity—Vegetable Subgroups Pictures



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Any Dried Bean/Legume Recipe Ideas?



Vegetable Sub-Group

<https://www.educateiowa.gov/school-nutrition-standards-2012>



Substituting Vegetables for Fruit at Breakfast: 2 options for Starchy Vegetable

As a Substitute for Fruit

- To offer starchy vegetable sub-group, must offer at least 2 cups of any other vegetable sub-group during the week

As an Extra

- Does NOT count as a component or item
- DOES count in average of weekly calories



Vegetables

Remember:

- Just because it's green, doesn't mean it's a "dark green" vegetable
- Just because it says "bean" or "pea" doesn't necessarily mean it's a "legume/dried bean/dried pea"
- Examples:
 - Green beans = "other"
 - Green peas = "starchy"
 - Iceberg lettuce = "other"



Crediting vegetables

Minimum creditable serving is 1/8 cup

Credit based on volume served: eg.-1/2 cup peas credits as 1/2 cup vegetable

EXCEPT:

- 1 cup leafy greens credits as 1/2 cup
- 1 tablespoon of tomato **paste** credits as 1/4 cup
- 2 tablespoons of tomato **puree** credits as 1/4 cup
- 1/4 cup of tomato **sauce** credits as 1/4 cup
- 1 cup of tomato **soup** credits as 1/4 cup
- or check CN label where available



Recap.....Questions?

- Milk
- Fruit
- Vegetables
- Grain-Bread
- Meat-Meat Alternate



Stand up and S-T-R-E-T-C-H!



SO

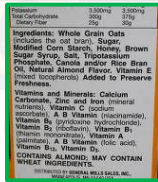


Meat/MA + Grain (usually) = Entree





Pasta and whole-grain waivers: apply, get permission, plan, evaluate, keep looking



INGREDIENTS: ENRICHED FLOUR (WHEAT FLOUR, NI-
IRON, THIAMIN MONONITRATE [VITAMIN B₁], RIBOFLAV-
IN, FOLIC ACID), CORN SYRUP, SUGAR, SOYBEAN AND PALM
OIL FOR FRESHNESS, CORN SYRUP SOLIDS, DEXTROSE,
CORN SYRUP, FRUCTOSE, GLYCERIN, CONTAINS 2% OR
LESS OF OTHER INGREDIENTS.

What to look for on the label!



1/4 ounce (.25) is minimum creditable grain



1/4 ounce (.25) is minimum creditable grain



- Cereal

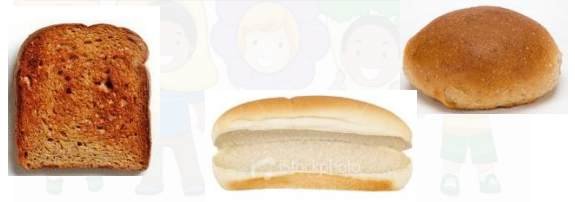
Get out your bread-grain chart!

Bread-Grain Chart

EXHIBIT A: SCHOOL LUNCH AND BREAKFAST WHOLE-GRAIN RICH OUNCE EQUIVALENCY (OZ EQ) REQUIREMENTS FOR SCHOOL MEAL PROGRAMS ^{1,2}	
GROUP A	OZ EQ FOR GROUP A
• Bread-type coating	1 oz eq = 22 gm or 0.8 oz
• Bread sticks (hard)	3/4 oz eq = 17 gm or 0.6 oz
• Cheese mini-sandwiches	1/2 oz eq = 11 gm or 0.4 oz
• Savory Crackers (saltines and stack crackers)	1/4 oz eq = 6 gm or 0.2 oz
• Cereals:	

FOODS CANNOT BE USED FOR BREAKFAST BREADS, BREAD STICKS, SANDWICHES, AND ALL OTHER PRODUCTS FOR SCHOOL MEAL PROGRAMS ^{1,2}	
• Bread-type coating	1 oz eq = 22 gm or 0.8 oz
• Bread sticks (hard)	3/4 oz eq = 17 gm or 0.6 oz
• Cheese mini-sandwiches	1/2 oz eq = 11 gm or 0.4 oz
• Savory Crackers (saltines and stack crackers)	1/4 oz eq = 6 gm or 0.2 oz
• Cereals:	

Bread, Bun, Roll



Doughnut



Brownie



Cereal



Grains



Meat/meat alternates



Meat/Meat Alternates-Lunch

Lunch: Daily and weekly minimums

- 9-12: 2 ounce equivalents daily (10 oz weekly min)
- K-8: 1 ounce equivalent daily (8-9 oz weekly min)

Variety of lean meat/meat alternates encouraged

An ounce of meat is often not an ounce equivalent of meat:

- 1.22 oz of ABC brand ham = 1 oz eq meat
- 4 oz yogurt = 1 oz eq meat alternate
- 1/4 cup dry beans/peas = 1 oz meat alternate
- 1 pound raw 80/20 ground beef = .74 pounds creditable meat

CN Label from USDA: Deli-Style Turkey

100122 – TURKEY, BREAST, COOKED, DELI-STYLE, SMOKED, FROZEN, 9-11 LB



PACK/YIELD:

- One lb AP provides about 10.0 1.6-oz servings of deli-style turkey breast.
- CN Crediting: 1.6 oz deli-style turkey breast provides 1 oz-equivalent meat/meat alternate.

For 9-12: How much turkey will you put on the sandwich?

Quick Quiz!



How much peanut butter equals 1oz equivalent of meat alternate?

Quick Quiz!



How much yogurt equals 2oz. equivalents of meat alternate?

Quick Quiz!



How much cheese equals 1oz equivalent of meat alternate?

Tips and Tricks



Items to double check:

- Cheese sauce/soups: not all credit
- Ravioli
- Pizza: pepperoni credits as nothing
- Bacon does not credit as meat/ma

Meat/MA at Breakfast: 2 options



1. In Place of a Second Grain

- Each breakfast meal option offered must include at least 1 oz. eq. of "real" grain
- After the first 1 oz. eq. of "real" grain is offered, meat/ma may be offered in place of additional grain

2. As an "Extra"

- *Does NOT* count as a component or item
- *DOES* count in average of weekly calories

Four Nutrient Targets

Weekly averages for:

- Calories
- Sodium
- Saturated Fat

Daily: zero Trans-Fat



Let's Play!

Get out Meal Pattern Exercise handout

Have Grain/Bread Chart handy

Have Meal Pattern handy

We will work on the first one together

- How much grain for two 6-gram packages of saltines? Four packages?
- Complete vegetable serving sizes so that all minimums are met. Need to change anything?
- Complete fruit serving sizes so that minimums are met. Are you offering both fruits to all students?
- How do you calculate minimum meat/ma and minimum grain when there is more than one entrée?
- Do all meal options offer enough meat/ma? Enough grain?



Meal Planning Spreadsheet

Meal Planning Spreadsheet

	Monday 11/15	Tuesday 11/16	Wednesday 11/17	Thursday 11/18	Friday 11/19	Saturday 11/20	Sunday 11/21
Entrée	Chicken Teriyaki	Chicken Teriyaki	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Side	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Grain	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Protein	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Vegetable	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Fruit	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Dairy	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Other	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice	Spicy Brown Rice
Calories	350-500	350-500	350-500	350-500	350-500	350-500	350-500
Sodium	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Saturated Fat	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Trans Fat	0	0	0	0	0	0	0

Does This Make More Sense?

Numbers indicate weekly minimums and maximums.

Numbers in parenthesis indicate daily minimums.

	BREAKFAST			LUNCH		
	Grades K-5 ^a	Grades 6-8 ^a	Grades 9-12 ^a	Grades K-5	Grades 6-8	Grades 9-12
Meal Pattern	Amount of Food ^b Per Week (Minimum Per Day)					
Fruits (cups) ^c	5 (1) ^a	5 (1) ^a	5 (1) ^a	2 1/2 (1/2)	2 1/2 (1/2)	5 (1)
Vegetables (cups) ^d	0	0	0	3 1/2 (1/2)	3 1/2 (1/2)	5 (1)
Dark green	0	0	0	1/2	1/2	1/2
Red/Orange	0	0	0	1/2	1/2	1/2
Beans/Peas (legumes) ^e	0	0	0	1/2	1/2	1/2
Starchy	0	0	0	1/2	1/2	1/2
Other	0	0	0	1/2	1/2	1/2
Additional Veg to Reach Total ^f	0	0	0	1	1	1 1/2
Grains (oz eq) ^g	7-10 (1) ^a	8-10 (1) ^a	8-10 (1) ^a	8-10 (1)	8-10 (1)	10-12 (2)
Meat/Meat Alternates (oz eq) ^h	0 ^a	0 ^a	0 ^a	8-10 (1)	8-10 (1)	10-12 (2)
Fluid milk (cups) ⁱ	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)

Other Specifications: Daily Amount Based on the Average for a 5-Day Week

Minimum calories (kcal) ^{j,k}	350-500	400-550	450-600	550-650	600-700	750-850
Saturated fat (% of total calories) ^l	< 10	< 10	< 10	< 10	< 10	< 10
Sodium (mg) ^m	< 450	< 470	< 500	< 600	< 710	< 740

^a Nutrition label on manufacturer specifications must indicate zero grams of fat, per serving

Market, Market, Market!

- ✓ Enough time to eat?
- ✓ Recess after Lunch?
- ✓ Breakfast After the Bell?
- ✓ Second Chance Breakfast?
- ✓ Breakfast in the Classroom?
- ✓ Grab and Go Lunch/Breakfast?
- ✓ Posters/Atmosphere?
- ✓ Descriptive Menu Names?
- ✓ Contests?
- ✓ Taste Tests?
- ✓ Classroom Education?
- ✓ Multiple fruit/veg choices?
- ✓ More than one Entrée?
- ✓ Good attitudes?

HELP!



Iowa Learning Online Professional Development
Iowa School Meal Programs Tutorials



One More Time!



BECAUSE



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- (1) Mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;
- (2) Fax: (202) 690-7442; or
- (3) Email: program.intake@usda.gov.

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Thank you!

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